

TITLE: Illumination device for projector, laser processing equipment, has cylindrical lens array to convert light emitted from laser array into parallel beams which are condensed by condenser lens to preset range
RICOH KK

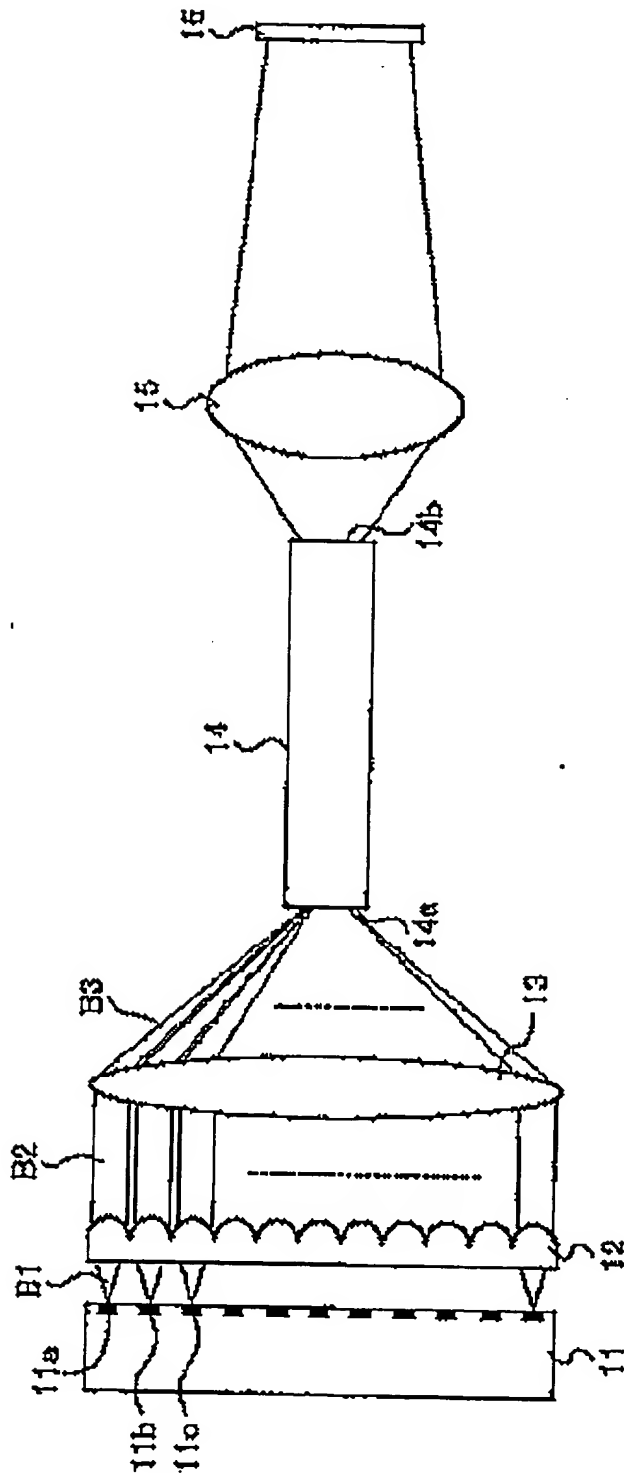
Priority Date: 12/15/2000

Patent Family:

Cntry	Serial	Kind	Date	Week
JP	2002184206	A	20020628	200273

Clipped Images:

Engineering Drawing:



Abstract:

Abstract (Basic): JP2002184206A

NOVELTY - A laser array (11) emits light beams which are made parallel using a cylindrical lens array (12). The parallel beams of diffused light are condensed by condenser lens (13) to preset range and transmitted towards the radiation end of a kaleidoscope (14).

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

- (1) Projector,
- (2) Aligner/exposure apparatus, and

(3) Laser processing equipment.

USE - For projector (claimed), aligner/exposure apparatus (claimed) and laser processing equipment (claimed).

ADVANTAGE - The system is compact though several laser arrays are arranged in the optical system.

DESCRIPTION OF DRAWING(S) - The figure shows the upper face outline composition of an optical illumination system.

Laser array 11

Cylindrical lens array 12

Condenser lens 13

Kaleidoscope 14

Dwg. 1/16

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B23K	026	06
B23K	026	08
F21S	002	00
F21V	011	00
F21V	014	00
G02B	027	00
G02F	001	13
G02F	001	13357
G03B	021	14
G03B	027	54
G03F	007	20
G09F	009	00
H01S	005	40
H04N	005	74
		U12-A01B1J
		U14-K01
		V07-F01
		V08-A04A
		V08-A07
		W04-Q01

mounting